



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
(Attorney Docket No. BP 1914)

2631
#3
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07-16-03

In the Application of:
Nabil R. Yousef et al.

Serial No.: 10/044,013

Filed: October 26, 2001

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§ Group Art Unit: 2631
§ Examiner: Unknown
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We are transmitting herewith for filing an Information Disclosure Statement under 37 C.F.R. 1.97 (b)(3).

Respectfully submitted,

Date: July 9, 2003

By: 

Bruce E. Garlick, Reg. 36,520

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Application Number	10/044,013
Filing Date	October 26, 2001
First Named Inventor	Nabil R. Yousef
Group Art Unit	2631
Examiner Name	
Attorney Docket Number	BP 1914

U.S. PATENT DOCUMENTS

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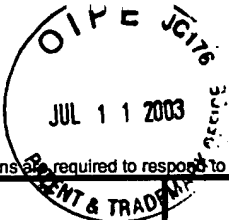
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OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

Examiner Initials ¹	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		KAILATH, SAYED: "Displacement structure: theory and applications" SIAM REVIEW, vol. 37, no. 3, September 1995 (1995-09), pages 297-386, XP002189613 New York, US	
		SAILER: "Decision feedback equalization for powerline and HIPERLAN" DISSERTATION SUBMITTED TO THE SWISS FEDERAL INSTITUTE OF TECHNOLOGY, ZURICH, FOR THE DEGREE OF DOCTOR OF TECHNICAL SCIENCES, 11 April 2001, pages 1-126, XP002189615, Zurich CD	
		CHUN, KAILATH: "Generalized displacement structure for block-Toeplitz, Toeplitz-block, and Toeplitz-derived matrices" NATO ASI SERIES, vol. F70, 1991, pages 215-236, XP000852863 Berlin, DE ISSN: 0258-1248,	
		CIOFFI, KAILATH: "Fast, recursive-least-squares transversal filters and adaptive filtering" IEEE TRANSACTIONS ON ACOUSTICS, SPEECH AND SIGNAL PROCESSING, vol. 32, no. 2, April 1984, pages 304-337, XP008015403, New York, US	
		LJUNG ET AL.: "Fast calculation of gain matrices for recursive estimation schemes" INTERNATIONAL JOURNAL OF CONTROL, vol. 27, no. 1, January 1978, pages 1-19, XP008002548, BASINGSTOKE, GB, ISSN: 0020-7179	
		AL-DHAHIR CIOFFI: "MMSE decision feedback equalizers: finite-length results" IEEE TRANSACTIONS ON INFORMATION THEORY, vol. 41, no. 4, July 1995, pages 961-975, XP002190789, New York, US	

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